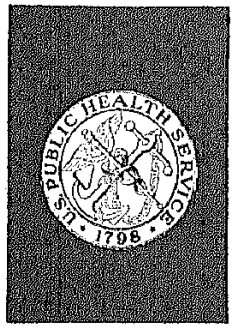

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SERIES B-No.20

HEALTH STATISTICS

FROM THE U. S. NATIONAL HEALTH SURVEY

Arthritis and Rheumatism reported in interviews

United States July 1957 - June 1959

Statistics on prevalence of arthritis and rheumatism and the disability due to these conditions by age, sex, and medical care status. Based on data collected in household interviews during the period July 1957-June 1959.

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
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Public Health Service
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Washington, D. C. September 1960

U. S. NATIONAL HEALTH SURVEY

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The U. S. National Health Survey is a continuing program under which the Public Health Service makes studies to determine the extent of illness and disability in the population of the United States and to gather related information. It is authorized by Public Law 652, 84th Congress.

CO-OPERATION OF THE BUREAU OF THE CENSUS

Under the legislation establishing the National Health Survey, the Public Health Service is authorized to use, insofar as possible, the services or facilities of other Federal, State, or private agencies. For the Health Interview Survey the Bureau of the Census designed and selected the sample, conducted the household interviews, and processed the data in accordance with specifications established by the Public Health Service.

Public Health Service Publication No. 584-B20

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EXPLANATION OF SYMBOLS

Data not available (three dashes)	---
Category not applicable (three dots)	...
Quantity is zero (1 dash)	-
Magnitude greater than zero but less than one-half of the unit used	0 or 0.0
Magnitude of the sampling error precludes showing separate estimates	(*)

ARTHRITIS AND RHEUMATISM

The various forms of arthritis and the allied diseases usually referred to as "rheumatism" are of particular importance in the study of chronic disease because of the great amount of disability for which they are responsible. The magnitude of this disability is explained by the high prevalence of these diseases in the population which, in turn, is due to the long duration of individual cases. Moreover, in contrast to many other chronic conditions of a serious nature, arthritis is characterized by a comparatively low fatality rate. The combined effect of the long duration and the low death rate is the accumulation of cases of arthritis and rheumatism in the population, thus producing a high prevalence rate at any point in time.

In the estimation of the national prevalence of arthritis and rheumatism particular care should be exercised in defining the terms of reference. Comprehensive data on which to base an estimate of all diagnosable cases in the population are not available. Community surveys in which samples of the population were given careful medical examination provide some information on prevalence based on clinical evidence.

For example, in the Baltimore phase[1] of the studies sponsored by the Commission on Chronic Illness during 1953-54, a prevalence rate of 75 per 1,000 population was obtained for arthritis, exclusive of rheumatism, from a clinical evaluation of a weighted sample of persons interviewed. The Hunterdon phase[2] of these studies produced a rate of 80 persons per 1,000 population for arthritis, exclusive of rheumatism.

On the basis of medical history, examination, and X-ray studies of 707 persons, a subsample of persons interviewed in the Arsenal Health District of Pittsburgh[3] during 1953-54, 71 persons per 1,000 population 15 years and older were found to have classical arthritis, and 147 per 1,000 had definite arthritis, a total rate of 218 per 1,000 persons age 15 and older. In this study classical arthritis cases are defined as those in which the physician was certain of the diagnosis, i.e., the case would fit a textbook description of one of the rheumatic diseases. Definite arthritis cases are defined as those for which the physician was certain that the individual had some form of arthritis, but the differential diagnosis was not perfectly clear.

While experts in the field have been hesitant to state what the total prevalence may be, statistics provided by studies, such as those cited, indicate that the national prevalence of arthritis alone is in excess of 12 million cases.

In the studies conducted by clinical examination, not all of the cases detected have developed to the stage where they have become a real problem to the affected individuals. Many have not even caused the person to seek medical care. Nevertheless, for meaningful epidemiological study of these diseases, clinical examination data are usually necessary. At the present time such data are available only for a few carefully studied communities.

As a measure of the impact that arthritis and rheumatism have upon the lives of those afflicted with the diseases, statistics from household interview surveys have been used. Statistics collected by this method must be used with a clear recognition of their qualifications.

In contrast to the concept of all diagnosable cases used in clinical examination studies, the cases of arthritis and rheumatism reported in household interviews represent a group of conditions less clearly defined diagnostically. If attended by a physician, they reflect the efforts of the family respondent to transmit to the interviewer whatever the physician has said about the condition. The terms in which such cases are reported range from specific medical terminology to simply "arthritis." Cases designated as "arthritis" that have never been medically attended probably represent the labeling of symptoms related to intermittent or persistent pain of the joints or muscles that has continued for some time.

Although it is impossible to set precise diagnostic limits on cases classified as arthritis or rheumatism in household interview surveys, it can be said of these cases that they have progressed to the point where they are of some concern to the persons affected. Household interview statistics measure the levels of this vaguely defined group of conditions in terms of cases reported because they have to some degree interfered with normal

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This report was prepared by Geraldine A. Gleeson of the U. S. National Health Survey staff.

living. The extent of this interference can be determined by interviews in terms of bed disability, loss of time from work, and limitation of activity and mobility.

Considering the uncertainty of the disease classifications that are labeled as arthritis and rheumatism in household surveys, it is remarkable that various surveys of this type have produced consistent results. In the Kansas City Metropolitan Area Survey[4] conducted during 1953-54 it was found that 63 persons per 1,000 population in that area reported arthritis or rheumatism. The California Health Survey[5] (1954-55) produced a rate of 59 persons with arthritis or rheumatism per 1,000 population. Survey results from the Hagerstown, Md., studies[6] (1955-57) yielded an estimate of 64 cases per 1,000 population.

On the basis of data from the U.S. National Health Survey during the period July 1957-June 1959, an estimated 10,845,000 persons in the United States were reported to have arthritis or rheumatism. This represents a rate of approximately 64 cases per 1,000 population, ranging from 2 cases per 1,000 among persons under 25 years of age to 286 per 1,000 among persons 75 years and older.

The remainder of this report deals with results of interviewing for the National Health Survey in greater detail. The statistics should be interpreted in light of the foregoing discussion.

SOURCE OF DATA ON CHRONIC CONDITIONS

Data on chronic conditions in the U. S. National Health Survey are based primarily on replies to four "illness-recall" questions in the health household interview.

1. Were you sick at any time last week or the week before?
2. Last week or the week before did you take any medicine or treatment for any condition?
3. At the present time do you have any ailments or conditions that have lasted for a long time? (If "No") Even though they don't bother you all the time?
4. Has anyone in the family had any of these conditions during the past 12 months? (Interviewer reads list of major chronic conditions which includes "arthritis or rheumatism.")

Positive responses concerning the diseases with which this report is concerned may come from any one of the four questions. The unduplicated positive replies serve as the basis for estimates of prevalence of the diseases in the population. Because the estimates are based on a continuing sample of household interviews throughout a 24-month period (July 1957-June 1959), the prevalence is actually an average prevalence during the 2-year period, that is, the average number of cases of arthritis and rheumatism existing in the population during that period.

Further questions are asked regarding each reported condition to obtain a more explicit description of its nature, and to obtain facts about medical attendance and disability. These facts are used to classify conditions by diagnosis and to establish the criteria of severity which are shown in this report.

Because of the possibilities for error in the reporting of the rheumatic diseases, a detailed classification of the conditions reported in a health interview survey is not warranted, in this report arthritis and rheumatism will be considered as a disease category including conditions affecting the musculoskeletal system and described by respondents as rheumatic or arthritic in nature.

In National Health Survey data, the disease category "arthritis and rheumatism" (international Lists Nos. 720-727) includes, in general, rheumatoid arthritis, osteoarthritis, lumbago, other specified or unspecified forms of arthritis, and muscular and unspecified forms of rheumatism. The category does not include rheumatic fever (400-402), sciatic neuritis (363), prolapsed disc (735), nor does it include symptoms related to the musculoskeletal system unless they were described by the respondent as arthritic or rheumatic in nature.

Even though arthritis and rheumatism are technically classified as separate disease entities in the coding procedure used in the National Health Survey, the two terms are in popular usage considered to be practically synonymous. It seems unlikely that any appreciable number of individuals would consider themselves to be afflicted with both arthritis and rheumatism. It is felt therefore, that combining the prevalence estimates for these diseases into a disease category results in very little duplication, and that the resultant prevalence figure is essentially an estimate of the number of persons with rheumatic disease affecting the musculoskeletal system.

A description of the statistical design of the household survey, and general qualifications of the data presented in the report are given in Appendix I. Particular attention is called to the section in Appendix I on Reliability of Estimates, which includes tables of sampling errors and instructions for their use. Explanations and definitions of special terms and concepts used in this report are presented in Appendix II.

PREVALENCE OF ARTHRITIS AND RHEUMATISM

Estimates based on clinical experience and survey studies have shown the prevalence of arthritis and rheumatism to be higher among females than among males. While this sex differential is apparent in National Health Survey data, it is quite possible that the difference in the rates

Table A. Percent distribution of cases of arthritis and rheumatism according to medical care status by sex: United States, July 1957-June 1959

Sex	Total	Medically attended		Never medically attended
		Under care	Not under care	
Both sexes	100.0	39.4	41.7	18.9
Male	100.0	34.5	43.0	22.4
Female	100.0	42.0	40.9	17.0

by sex, 46 cases per 1,000 males and 81 cases per 1,000 females, is unduly influenced by the preponderance of female respondents in the household interview. Conditions, such as arthritis and rheumatism, that are sometimes self-diagnosed on the basis of symptoms, or are not under continuous medical care are more frequently reported by self-respondents than by "proxy" respondents, i.e., related persons living in the same household.

The prevalence of arthritis and rheumatism by age for males and females is shown in figure 1. A higher proportion of the cases among females, 42 percent, were under the care of a physician as compared with about 35 percent of the cases among males. About 17 percent of females with arthritis or rheumatism had never been seen by a physician, while approximately 22 percent of the males had never had medical attention for their condition (table A).

A general idea of the severity of arthritis and rheumatism can be gained from table 2, which shows the number and percent distribution of cases of these diseases causing bed disability. About 11 percent of the persons with these diseases had 1 or more days of bed disability during the 12-month period prior to interview, and about 7 percent had 7 or more days of bed disability. These percents are quite consistent for each of the age-sex groups shown in the table. However, it must be remembered that these percents merely represent the proportion of cases in each group that had at least 1 or at least 7 bed-disability days, but give no indication of differences in the range of number of bed-days per person in the various age-sex groups.

DISABILITY DUE TO ARTHRITIS AND RHEUMATISM

The National Health Survey collects data that measure two aspects of the disability associated with chronic conditions: one, long-term disability described as limitation of activity and mobility, and the other, comparatively short periods of disability measured in terms of disability days.

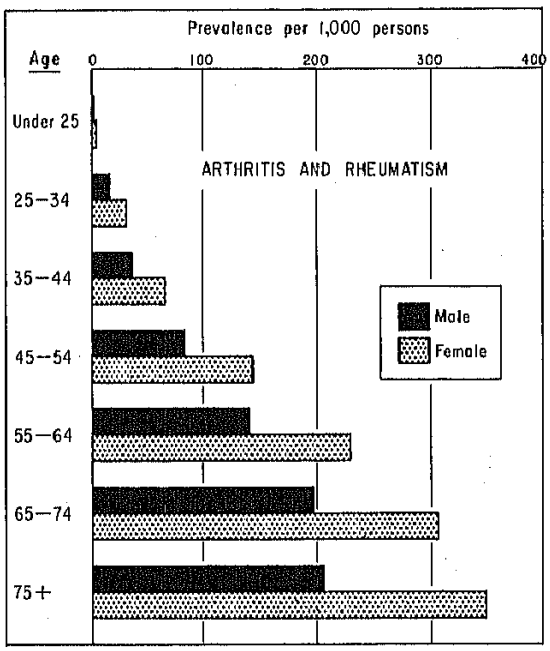

Figure 1. Prevalence of arthritis and rheumatism per 1,000 population by sex and age.

For certain conditions, either one or the other of these measures is appropriate in the assessment of social and economic losses due to the condition. For others the two measures tend to complement each other in describing the impact of the condition. This is particularly true for conditions such as arthritis and rheumatism which cause a fair proportion of those afflicted to be completely disabled while others continue in their usual activity with occasional short periods of disability.

Long-Term Disability

In terms of activity limitation, about 25 percent of the persons with arthritis or rheumatism

were either unable to carry on their major activity or were limited in the amount or kind of major or outside activities (table 3). This combined rate of partial and major limitation of activity was consistent for males and females, with the rate for each of the sexes displaying the same pattern of increase with age. However, when major limitation of activity (inability to carry on major activity) was considered apart from partial limitation, a larger proportion of the males were in the major limitation category. This sex differential is not surprising in view of the greater expectation of physical fitness in males for the performance of usual activities.

Approximately 10 percent of persons with arthritis or rheumatism had limitation of mobility due to these diseases in that they were confined to the house, except in emergencies, or were limited or needed help in getting around outside the house. The increase in limitation of mobility with age is similar to that for limitation of activity, with the exception that a significantly higher percent of females 65 years of age and over (21 percent) had mobility limitation than was noted for males in this age group (14 percent). This difference may be explained to some extent by the greater number of females in the older age years within this broad age category 65 years and older.

The long-term disability due to arthritis and rheumatism in terms of limitation of activity and mobility is summarized graphically in figure 2. The means by which this information was collected is contained in Appendix III (cards C-G), and a comprehensive definition of partial and major limitation can be found in Appendix II.

Disability Days

In National Health Survey data, three types of disability days are used to describe the extent to which a person's activity is reduced as a result of a disease or condition. The most inclusive of these is a day of restricted activity; by definition, a day on which a person had to cut down on his usual activities for the whole of that day because of his condition. Such a day is considered to be a day of bed disability if the condition kept him in bed for all or most of the day. A day of restricted activity may also be a day lost from work if the person involved was 17 years of age or over and would have been working if he had not been ill.

Approximately 238 million days of restricted activity per year were attributed to arthritis and rheumatism (table 5). In accordance with the higher prevalence of these conditions among females, about 154 million days were reported for

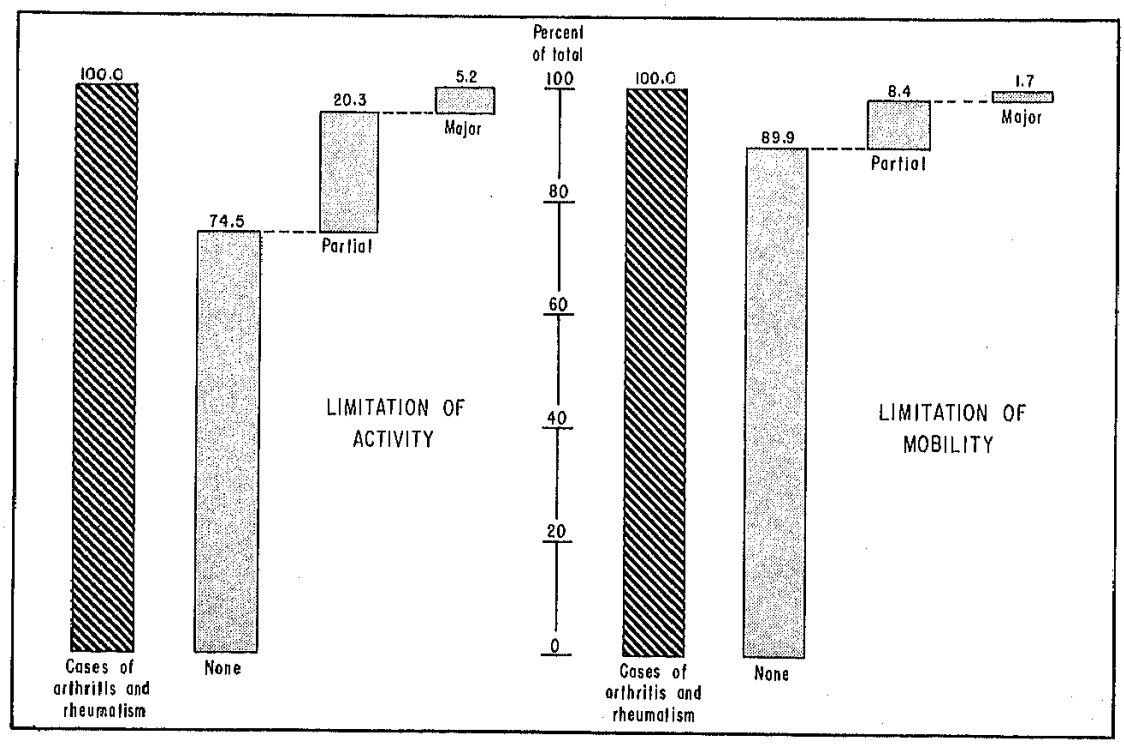

Figure 2. Cases of arthritis and rheumatism according to activity and mobility limitation.

females, and 84 million for males. However, in terms of restricted-activity days per person per year, there was no difference in the average number of days for men and for women (22 restricted-activity days per person with arthritis or rheumatism per year). For both sexes there was a gradual increase with age in the number of restricted-activity days per person for those over 25 years of age.

Approximately 60 million, or one fourth of the 238 million restricted-activity days, were bed-disability days. This represents an average of 5.6 bed-days per person per year, with no appreciable difference in the rate for both sexes (fig. 3). As in the case of the restricted-activity

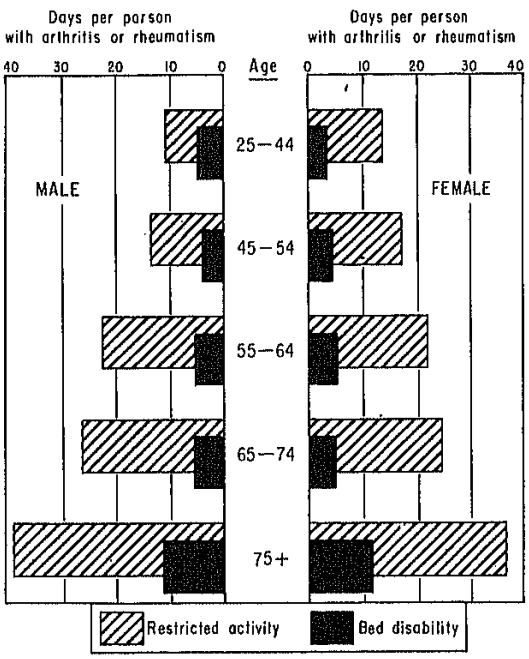

Figure 3. Average number of disability days per year per person with arthritis or rheumatism by sex and age.

days, there was a gradual increase with age in the number of bed-days per person, from 3.9 days per person 25-44 years of age to 11.4 days per person 75 years and older (table B).

These rates of bed disability estimate the total impact of the rheumatic diseases. While they are appropriate to use in comparing the disability caused by these diseases with that attributable to other chronic conditions, they do not adequately describe the effect on the disabled individual. The effects of the rheumatic diseases vary from slight pain or stiffness to total invalidism. This means that many persons with rheumatic conditions have

Table B. Bed-disability days per person with arthritis or rheumatism and per person with 1 or more bed-days attributable to arthritis and rheumatism by age: United States, July 1957-June 1959

Age	Bed-disability days per year	
	Per person with the condition	Per person with 1 or more bed-days attributed to the condition
All ages-25+---	5.6	50.4
25-44---	3.9	30.6
45-54---	4.2	36.9
55-64---	5.2	45.8
65-74---	5.1	54.7
75+---	11.4	103.3

little or no bed disability, while others may be totally bed-ridden. From data shown in table 2, it may be noted that only 1,223,000 persons, about 11 percent of the 10,845,000 persons with arthritis or rheumatism, were disabled to the extent of having any bed disability. Thus, although the number of bed-days per year per person 25 years or older with arthritis or rheumatism was only 5.6, the average number of bed-days for those persons who were sick enough to spend at least one day in bed was 50.4 (table B).

Various measures of the amount of work loss associated with arthritis and rheumatism are presented in table 6. Approximately 27 million days of work loss were attributed to arthritis and rheumatism, of which 17 million days were lost by persons who reported "usually working" as their major activity. Due to the higher proportion of males in the working population, about 19 million work-days were lost by all males and 12 million by "usually working" males, compared with 8 million work-days by all females and 5 million by "usually working" females.

Work-loss days per year per person with arthritis and rheumatism (col. 3 of table 6) was obtained by dividing total work-loss days by the number of persons with arthritis or rheumatism. To obtain the number of work-loss days per "usually working" person with arthritis and rheumatism (col. 4), the number of days for "usually working" persons was divided by the number of "usually working" persons with arthritis and rheumatism. The final column of table 6 shows the number of days attributable to arthritis and rheu-

matism per "usually working" person in the population. This rate is a very broad measure of the effect of disability due to arthritis and rheumatism on the general economy of the population. It is most meaningful when used with comparable rates for other types of disabling conditions to determine the relative amount each condition contributes to the total amount of time lost by "usually working" persons.

REFERENCES

[1]Commission on Chronic Illness in 1953-54: Chronic Illness in a Large City: The Baltimore Study (Chronic Illness in the United States, Vol. IV). Harvard University Press, Cambridge, Mass., 1957.

[2]Commission on Chronic Illness: Chronic Illness in a Rural Area: The Hunterdon Study (Chronic Illness in the United States, Vol. III). Harvard University Press, Cambridge, Mass., 1959.

[3]Cobb, S., et al: On the Measurement of Prevalence of Arthritis and Rheumatism from Interview Data, J. Chron. Dis. 3, No. 2, Feb. 1956.

[4]Peterson, W. A.: Kansas City Metropolitan Area Health Survey. Community Studies, Inc., Kansas City, Mo., 1959.

[5]State of California, Department of Public Health. Health in California. California State Printing Office, Sacramento, Calif.

[6]West, M. D., and Altenderfer, M. E.: Illness and Medical Care in Hagerstown, Maryland. I. The Prevalence of Chronic Disease in 1955-57 as Measured by Household Interviews. Public Health Service, Washington, D. C., Oct. 1958.

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Table 1. Average prevalence of arthritis and rheumatism *as reported in interviews* by sex and age according to medical attention: United States, July 1957–June 1959

[Data are based on household interviews during July 1957–June 1959. Data refer to the civilian noninstitutional population of the United States. Detailed figures may not add to totals due to rounding. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

Sex and age	Total	Medically attended		Never medically attended	Total	Medically attended		Never medically attended
		Total	Under care	Not under care		Total	Under care	Not under care	
	Average number in thousands				Rate per 1,000 population				
Both sexes									
All ages	10,845	8,792	4,272	4,520	2,053	63.9	51.8	25.2	26.6	12.1
Under 25	187	143	56	87	44	2.5	1.9	0.7	1.2	0.6
25-34	533	407	166	241	125	23.6	18.0	7.4	10.7	5.5
35-44	1,204	983	430	553	221	52.3	42.7	18.7	24.0	9.6
45-54	2,253	1,846	862	985	407	113.6	93.1	43.5	49.7	20.5
55-64	2,769	2,253	1,092	1,161	516	185.5	150.9	73.1	77.8	34.6
65-74	2,477	2,011	1,037	974	466	255.4	207.4	106.9	100.4	48.1
75+	1,421	1,147	628	519	274	286.0	230.8	126.4	104.4	55.1
Male									
All ages	3,806	2,952	1,314	1,638	854	46.1	35.7	15.9	19.8	10.3
Under 25	69	56	(*)	(*)	(*)	1.9	1.5	(*)	(*)	(*)
25-34	176	125	49	77	51	16.3	11.6	4.5	7.1	4.7
35-44	412	332	129	203	80	37.2	30.0	11.7	18.3	7.2
45-54	808	640	281	359	168	83.5	66.1	29.0	37.1	17.4
55-64	998	770	337	433	228	138.9	107.2	46.9	60.3	31.7
65-74	898	700	328	373	198	198.2	154.5	72.4	82.3	43.7
75+	444	327	163	164	117	205.8	151.6	75.6	76.0	54.2
Female									
All ages	7,038	5,840	2,958	2,882	1,198	80.7	67.0	33.9	33.0	13.7
Under 25	119	87	(*)	57	(*)	3.2	2.3	(*)	(*)	(*)
25-34	356	282	118	165	74	30.2	23.9	10.0	14.0	6.3
35-44	792	651	301	350	141	66.3	54.5	25.2	29.3	11.8
45-54	1,445	1,206	581	625	239	142.3	118.7	57.2	61.5	23.5
55-64	1,771	1,483	755	728	288	228.6	191.4	97.5	94.0	37.2
65-74	1,579	1,311	709	601	268	305.6	253.7	137.2	116.3	51.9
75+	977	820	465	355	156	347.4	291.6	165.4	126.2	55.5

Table 2. Average number and percent distribution of persons with arthritis or rheumatism *as reported in interviews* according to amount of bed disability by sex and age: United States, July 1957–June 1959

[Data are based on household interviews during July 1957–June 1959. Data refer to the civilian noninstitutional population of the United States. Detailed figures may not add to totals due to rounding. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

Sex and age	Total	With no bed-disability days	With 1+ bed-disability days	With 7+ bed-disability days	Total	With no bed-disability days	With 1+ bed-disability days	With 7+ bed-disability days
	Number of persons in thousands				Percent distribution			
Both sexes								
All ages---	10,845	9,622	1,223	759	100.0	88.7	11.3	7.0
Under 25------	187	147	(*)	(*)	100.0	78.6	(*)	(*)
25-34---------	533	455	77	46	100.0	85.4	14.4	8.6
35-44---------	1,204	1,060	144	84	100.0	88.0	12.0	7.0
45-54---------	2,253	1,996	258	145	100.0	88.6	11.5	6.4
55-64---------	2,769	2,452	317	209	100.0	88.6	11.4	7.5
65-74---------	2,477	2,248	229	143	100.0	90.8	9.2	5.8
75+----------	1,421	1,264	157	110	100.0	89.0	11.0	7.7
Male								
All ages---	3,806	3,393	414	265	100.0	89.1	10.9	7.0
Under 25------	69	54	(*)	(*)	100.0	78.3	(*)	(*)
25-34---------	176	149	(*)	(*)	100.0	84.7	(*)	(*)
35-44---------	412	364	48	(*)	100.0	88.3	11.7	(*)
45-54---------	808	717	92	53	100.0	88.7	11.4	6.6
55-64---------	998	880	117	78	100.0	88.2	11.7	7.8
65-74---------	898	825	73	42	100.0	91.9	8.1	4.7
75+----------	444	403	41	(*)	100.0	90.8	9.2	(*)
Female								
All ages---	7,038	6,230	809	494	100.0	88.5	11.5	7.0
Under 25------	119	94	(*)	(*)	100.0	79.0	(*)	(*)
25-34---------	356	306	50	(*)	100.0	86.0	14.0	(*)
35-44---------	792	696	96	51	100.0	87.9	12.1	6.4
45-54---------	1,445	1,279	166	92	100.0	88.5	11.5	6.4
55-64---------	1,771	1,571	200	131	100.0	88.7	11.3	7.4
65-74---------	1,579	1,423	156	102	100.0	90.1	9.9	6.5
75+----------	977	861	116	78	100.0	88.1	11.9	8.0

Table 1. Average prevalence of arthritis and rheumatism *as reported in interviews* by sex and age according to medical attention: United States, July 1957–June 1959

[Data are based on household interviews during July 1957–June 1959. Data refer to the civilian noninstitutional population of the United States. Detailed figures may not add to totals due to rounding. The survey design, [illegible] qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

Sex and age	Total	Medically attended			Never medically attended	Total	Medically attended			Never medically attended
		Total	Under care	Not under care			Total	Under care	Not under care	
	Average number in thousands					Rate per 1,000 population				
Both sexes										
All ages	10,845	8,792	4,272	4,520	2,053	63.9	51.8	25.2	26.6	12.1
Under 25	187	143	56	87	44	2.5	1.9	0.7	1.2	0.6
25-34	533	407	166	241	125	23.6	18.0	7.4	10.7	5.5
35-44	1,204	983	430	553	221	52.3	42.7	18.7	24.0	9.6
45-54	2,253	1,846	862	985	407	113.6	93.1	43.5	49.7	20.5
55-64	2,769	2,253	1,092	1,161	516	185.5	150.9	73.1	77.8	34.6
65-74	2,477	2,011	1,037	974	466	255.4	207.4	106.9	100.4	48.1
75+	1,421	1,147	628	519	274	286.0	230.8	126.4	104.4	55.1
Male										
All ages	3,806	2,952	1,314	1,638	854	46.1	35.7	15.9	19.8	10.3
Under 25	69	56	(*)	(*)	(*)	1.9	1.5	(*)	(*)	(*)
25-34	176	125	49	77	51	16.3	11.6	4.5	7.1	4.7
35-44	412	332	129	203	80	37.2	30.0	11.7	18.3	7.2
45-54	808	640	281	359	168	63.5	66.1	29.0	37.1	17.4
55-64	998	770	337	433	228	138.9	107.2	46.9	60.3	31.7
65-74	898	700	328	373	198	198.2	154.5	72.4	82.3	43.7
75+	444	327	163	164	117	205.8	151.6	75.6	76.0	54.2
Female										
All ages	7,038	5,840	2,958	2,882	1,198	80.7	67.0	33.9	33.0	13.7
Under 25	119	87	(*)	57	(*)	3.2	2.3	(*)	(*)	(*)
25-34	356	282	118	165	74	30.2	23.9	10.0	14.0	6.3
35-44	792	651	301	350	141	66.3	54.5	25.2	29.3	11.8
45-54	1,445	1,206	581	625	239	142.3	118.7	57.2	61.5	23.5
55-64	1,771	1,483	755	728	288	228.6	191.4	97.5	94.0	37.2
65-74	1,579	1,311	709	601	268	305.6	253.7	137.2	116.3	51.9
75+	977	820	465	355	156	347.4	291.6	165.4	126.2	55.5

Table 2. Average number and percent distribution of persons with arthritis or rheumatism *as reported in interviews* according to amount of bed disability by sex and age: United States, July 1957–June 1959

[Data are based on household interviews during July 1957–June 1959. Data refer to the civilian noninstitutional population of the United States. Detailed figures may not add to totals due to rounding. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

Sex and age	Total	With no bed-disability days	With 1+ bed-disability days	With 7+ bed-disability days	Total	With no bed-disability days	With 1+ bed-disability days	With 7+ bed-disability days
	Number of persons in thousands				Percent distribution			
Both sexes								
All ages---	10,845	9,622	1,223	759	100.0	88.7	11.3	7.0
Under 25------	187	147	(*)	(*)	100.0	78.6	(*)	(*)
25-34---------	533	455	77	46	100.0	85.4	14.4	8.6
35-44---------	1,204	1,060	144	84	100.0	88.0	12.0	7.0
45-54---------	2,253	1,996	258	145	100.0	88.6	11.5	6.4
55-64---------	2,769	2,452	317	209	100.0	88.6	11.4	7.5
65-74---------	2,477	2,248	229	143	100.0	90.8	9.2	5.8
75+----------	1,421	1,264	157	110	100.0	89.0	11.0	7.7
Male								
All ages---	3,806	3,393	414	265	100.0	89.1	10.9	7.0
Under 25------	69	54	(*)	(*)	100.0	78.3	(*)	(*)
25-34---------	176	149	(*)	(*)	100.0	84.7	(*)	(*)
35-44---------	412	364	48	(*)	100.0	88.3	11.7	(*)
45-54---------	808	717	92	53	100.0	88.7	11.4	6.6
55-64---------	998	880	117	78	100.0	88.2	11.7	7.8
65-74---------	898	825	73	42	100.0	91.9	8.1	4.7
75+----------	444	403	41	(*)	100.0	90.8	9.2	(*)
Female								
All ages---	7,038	6,230	809	494	100.0	88.5	11.5	7.0
Under 25------	119	94	(*)	(*)	100.0	79.0	(*)	(*)
25-34---------	356	306	50	(*)	100.0	86.0	14.0	(*)
35-44---------	792	696	96	51	100.0	87.9	12.1	6.4
45-54---------	1,445	1,279	166	92	100.0	88.5	11.5	6.4
55-64---------	1,771	1,571	200	131	100.0	88.7	11.3	7.4
65-74---------	1,579	1,423	156	102	100.0	90.1	9.9	6.5
75+----------	977	861	116	78	100.0	88.1	11.9	8.0

Table 5. Average annual number of disability days associated with arthritis and rheumatism and disability days per person with arthritis or rheumatism per year *as reported in interviews* by sex and age: United States, July 1957–June 1959

[Data are based on household interviews during July 1957–June 1959. Data refer to the civilian noninstitutional population of the United States. Detailed figures may not add to totals due to rounding. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

Sex and age	Disability days			
	Restricted activity		Bed disability	
	Number (in thousands)	Per person with the condition per year	Number (in thousands)	Per person with the condition per year
Both sexes				
All ages	237,961	21.9	60,408	5.6
Under 25	3,703	19.8	(*)	(*)
25-44	22,097	12.7	6,760	3.9
45-54	35,917	15.9	9,525	4.2
55-64	60,996	22.0	14,507	5.2
65-74	62,155	25.1	12,531	5.1
75+	53,094	37.4	16,216	11.4
Male				
All ages	83,592	22.0	21,655	5.7
Under 25	(*)	(*)	(*)	(*)
25-44	6,391	10.9	2,821	4.8
45-54	11,059	13.7	3,173	3.9
55-64	22,438	22.5	5,231	5.2
65-74	23,558	26.2	4,918	5.5
75+	17,218	38.8	5,007	11.3
Female				
All ages	154,369	21.9	38,753	5.5
Under 25	(*)	(*)	(*)	(*)
25-44	15,706	13.7	3,939	3.4
45-54	24,858	17.2	6,352	4.4
55-64	38,558	21.8	9,276	5.2
65-74	38,596	24.4	7,613	4.8
75+	35,876	36.7	11,209	11.5

Table 6. Average annual number of work-loss days associated with arthritis and rheumatism and number of work-loss days per person with arthritis or rheumatism and per "usually working" person per year *as reported in interviews* by sex and age: United States, July 1957–June 1959

[Data are based on household interviews during July 1957–June 1959. Data refer to the civilian noninstitutional population of the United States. Detailed figures may not add to totals due to rounding. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

Sex and age	Work loss days (in thousands)		Work-loss days per year		
	Total	Among "usually working" persons	Per person with the condition	Per "usually working" person with the condition	Per "usually working" person
Both sexes					
All ages-17+	27,126	16,782	2.5	4.4	0.3
17-44	5,164	4,006	2.7	4.4	0.1
45-54	6,971	4,191	3.1	3.5	0.3
55-64	9,810	5,719	3.5	4.9	0.7
65+	5,180	2,866	1.3	5.4	1.1
Male					
All ages-17+	18,814	11,931	5.0	4.9	0.3
17-44	3,980	3,229	6.2	5.6	0.1
45-54	4,246	3,114	5.3	4.3	0.3
55-64	5,801	2,777	5.8	3.7	0.5
65+	4,787	2,812	3.6	7.7	1.3
Female					
All ages-17+	8,312	4,851	1.2	3.5	0.3
17-44	(*)	(*)	(*)	(*)	(*)
45-54	2,725	1,077	1.9	2.3	0.3
55-64	4,009	2,942	2.3	6.8	1.3
65+	(*)	(*)	(*)	(*)	(*)

Table 7. Average population used in obtaining rates shown in this publication by age and sex: United States, July 1957-June 1959

[Data are based on household interviews during July 1957-June 1959. Data refer to the civilian noninstitutional population of the United States. Detailed figures may not add to totals due to rounding. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

Age	Both sexes		Male		Female	
	Total	Persons with arthritis or rheumatism	Total	Persons with arthritis or rheumatism	Total	Persons with arthritis or rheumatism
	Population in thousands					
All ages	169,835	10,845	82,633	3,806	87,202	7,038
Under 25	74,826	187	37,233	69	37,593	119
25-34	22,558	533	10,783	176	11,776	356
35-44	23,021	1,204	11,072	412	11,949	792
45-54	19,833	2,253	9,675	808	10,157	1,445
55-64	14,930	2,769	7,183	998	7,747	1,771
65-74	9,698	2,477	4,530	898	5,167	1,579
75+	4,969	1,421	2,157	444	2,812	977

NOTE: For official population estimates for more general use, see Bureau of the Census reports on the civilian population of the United States, in Current Population Reports: Series P-20, P-25, P-50, P-57, and P-60.

Table 8. Average population used in obtaining work-loss rates shown in this publication by sex and age: United States, July 1957–June 1959

[Data are based on household interviews during July 1957–June 1959. Data refer to the civilian noninstitutional population of the United States. Detailed figures may not add to totals due to rounding. The survey design, general qualifications, and information on the reliability of the estimates are given in Appendix I. Definitions of terms are given in Appendix II]

Sex and age	Persons with arthritis or rheumatism	"Usually working" persons with arthritis or rheumatism	"Usually working" persons
	Population in thousands		
Both sexes			
All ages-17+	10,803	3,813	59,393
17-44	1,883	915	35,230
45-54	2,253	1,187	13,083
55-64	2,769	1,178	8,369
65+	3,898	533	2,711
Male			
All ages-17+	3,788	2,413	41,672
17-44	639	576	24,494
45-54	808	724	9,036
55-64	998	747	6,047
65+	1,343	366	2,095
Female			
All ages-17+	7,015	1,400	17,721
17-44	1,244	338	10,736
45-54	1,445	463	4,047
55-64	1,771	431	2,322
65+	2,555	168	617

NOTE: For official population estimates for more general use, see Bureau of the Census reports on the civilian population of the United States, in Current Population Reports: Series P-20, P-25, P-50, P-57, and P-60.

APPENDIX I

TECHNICAL NOTES ON METHODS

Background of This Report

This report on Arthritis and Rheumatism is one of a series of statistical reports covering separate health-related topics which are prepared by the U. S. National Health Survey. The report is based on information collected in the continuing nationwide sample of households in the Health Interview Survey, which is a main aspect of the program.

The Health Interview Survey uses a questionnaire which, in addition to personal and demographic characteristics, elicits information on illnesses, injuries, chronic conditions, medical care, dental care, and hospitalization. As interview data relating to each of these various broad subject areas are tabulated and analyzed, separate reports are issued covering one or more specific topics. The present report contains data for 104 weeks of interviewing ending June 28, 1959.

The population covered by the sample for the Health Interview Survey is the civilian population living in the United States at the time of the household interview. Although the sample collection covers persons who are inmates of institutions, data for these persons are not included in the figures given in these reports. Also the sample does not include members of the Armed Forces, United States nationals living in foreign countries, and crews of vessels.

Statistical Design of the Health Interview Survey

General plan.—The sampling plan of the survey follows a multistage probability design which permits a continuous sampling of the civilian population of the United States. This plan utilizes the 1,900 Primary Sampling Units consisting of counties, groups of contiguous counties, and Standard Metropolitan Statistical Areas into which the country has been divided. The first stage of the design consists of drawing a sample from these Primary Sampling Units (PSU's). During the first 18 months of the Health Interview Survey the sample size was 372 PSU's. This was increased to 500 PSU's in January 1959. However, the basic sampling design and methods of estimating remained unchanged during the two-year period covered by this report. The number of ratio estimating classes shown subsequently in this Appendix are those which applied to the first 18 months of the survey.

With no loss in general understanding, the remaining stages of the sampling can be telescoped and treated in this discussion as an ultimate stage. Within PSU's, then, ultimate stage units called segments are defined, also geographically, in such a manner that each segment contains an expected six households. Each week a random sample of about 120 segments is drawn. In the approximately 700 households in those segments, persons are interviewed concerning illnesses, injuries, chronic conditions, disability, and other factors related to health.

The household members included each week are a representative sample of the population so that samples for successive weeks can be combined into larger samples for, say, a calendar quarter, a year, or more. Thus the design permits both continuous measurement of characteristics of high incidence or prevalence in the population and, through the larger consolidated samples, more detailed analysis of less common characteristics and smaller categories. The continuous collection has administrative and operational advantages as well as technical assets, since it permits field work to be handled with an experienced, stable staff.

Sample size and geographic detail.—The national sample plan during the 24-month period ending June 1959 included approximately 235,000 persons from 73,000 households in 12,200 segments. The over-all sample was designed in such a fashion that tabulations can be provided for various geographic sections of the United States and for urban and rural sectors of the Nation.

Collection of data.—The field operations for the household survey are performed by the Bureau of the Census under specifications established by the Public Health Service. In accordance with these specifications the Bureau of the Census designs and selects the sample, conducts the field interviewing, and edits and codes the questionnaires. Tabulations are prepared by the Public Health Service using the Bureau of the Census electronic computers.

Estimating methods.—Each statistic produced by the survey is the result of two stages of ratio estimation. In the first of these, the factor is the ratio of the 1950 decennial U. S. total population count to the estimated population in 1950 of the U. S. National Health Survey's first-stage sample of PSU's. This factor is applied separately for more than 50 color-residence classes.

Later, ratios of sample-produced estimates of the population to official Bureau of the Census figures for current population in about 60 age-sex-color classes are computed, and serve as second-stage factors for ratio estimating.

The effect of the ratio estimating process is to make the sample more closely representative of the population by age, sex, color, and residence, thus reducing sampling variance.

As noted, each week's sample represents the population living during that week and characteristics of that population. Consolidation of samples over a time period such as a calendar quarter produces estimates of average characteristics of the U. S. population for that calendar quarter.

For prevalence statistics based on two years of data collection, figures are first calculated for each calendar quarter by averaging estimates for all weeks of interviewing in that quarter. Prevalence data based on eight quarters of interviewing are then obtained by averaging the eight quarterly figures.

For statistics measuring the number of occurrences during a specified time period, a similar computational procedure is used, but the statistics have a different interpretation. For the disability-day items, the interviewer asks for the reapondent's experience over the two calendar weeks prior to the week of interview. Then, the estimated quarterly total for a statistic is simply 6.5 times the average two-week estimate produced by the 13 successive samples taken during the period. Thus, the experience of persons interviewed during a year—experience which actually occurred for each person in a two-calendar-week interval prior to week of interview—is treated in analysis as though it measured the total of such experience occurring in the year. For most statistics such interpretation leads to no significant bias. As noted earlier, the interviewing and estimation procedures are designed to reproduce the experience during the reference period of the questionnaire only for the population still living at the time of interview.

General Qualifications

Nonresponse.—Data are adjusted for nonresponse by a procedure which imputes to persons in a household not interviewed the characteristics of persons in households which were interviewed in the same segment. The total noninterview rate is 5 percent; 1 percent is refusal, and the remainder is accounted for by other reasons, such as failure to find any household respondent after repeated trials.

The interview process.—The statistics presented in this report are based on replies secured by interviewing members of the sampled households. Each person, 18 years and over, available at the time of interview, is interviewed individually. Proxy respondents within the household are employed for children and for adults who are not available at the time of the interview, provided the respondent is closely related to the person about whom information is being obtained.

There are limitations to the accuracy of diagnostic and other information collected in household interviews. For diagnostic information the household respondent, can, at best, pass on to the interviewer only the information the physician has given to the family. For conditions not medically attended, diagnostic information is often no more than a description of symptoms. However, other types of facts such as the number of disability days caused by the condition can be obtained more accurately from household members than from any other source.

Rounding of numbers.—The original tabulations on which data in this report are based show all estimates to the nearest whole unit. All consolidations are made from these original tabulations before the numbers are rounded to the nearest thousand for the published tables. Derived statistics such as rates and percent distributions are computed after the estimates have been rounded. Rounding to thousands has been done throughout this report even though, because of sampling error, the estimates may not be accurate to that detail.

Population figures.—Some of the published tables include population figures for specified categories. Except for certain over-all totals by age and sex (which are independently estimated), these figures are based on the sample of households in the U. S. National Health Survey. They are given primarily for the purpose of providing denominators for rate computation, and for this purpose are more appropriate for use with the accompanying measures of health characteristics than other population data which may be available. In some instances they will permit users to recombine published data into classes more suitable to their specific needs. With the exception of the over-all totals by age and sex mentioned above, the population figures may in some cases differ from corresponding figures (which are derived from different sample surveys) published in reports of the Bureau of the Census. For population data for general use, see the official estimates presented in Bureau of the Census reports in the P-20, P-25, P-50, P-57, and P-60 series.

Reliability of Estimates

Since the estimates are based on a sample, they may differ somewhat from the figures that would have been obtained if a complete census had been taken using the same schedules, instructions, and interviewing personnel and procedures. As in any survey, the results are also subject to measurement error.

The standard error is primarily a measure of sampling variability, that is, the variations that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the standard error also reflects part of the variation which arises in the measurement process. It does not include estimates of any biases which might lie in the data. The chances are about 68 out of 100 that an estimate from the sample differs from the value obtained from a complete census by less than the standard error. The chances are about 95 out of 100 that the difference is less than twice the standard error and about 99 out of 100 that it is less than 2½ times as large.

In order to derive standard errors which are applicable to a wide variety of health statistics and which can be prepared at a moderate cost, a number of approximations are required. As a result, tables I through III, included in this Appendix should be interpreted as providing an estimate of the standard error rather than as the precise standard error for any specific statistic.

The following guides will enable the reader to determine sampling errors for the statistics presented in this report:

1. Approximate standard errors for estimates of the number of cases of a chronic condition, the number of disability days associated with a chronic condition, and the number of persons in a population group[1] are obtained from the appropriate columns of table I.
2. Approximate standard errors for percentage distributions of a chronic condition according to the number of bed-disability days or the extent of activity or mobility limitation associated with it are given in table II.
3. Approximate standard errors for prevalence estimates of a chronic condition per 1,000 persons in an age, sex, or color group or per 1,000 total population are obtained from table II. Since table II is set up for the estimation of the standard error of a rate per 100, the prevalence per 1,000 must first be converted to a percentage; table II is then entered with this percentage and the number of persons in the category (base of the percentage). The entry in the body of the

[1] The number of persons in an age, sex, or color group, or the total number of persons in the population is not subject to sampling error.

table must then be multiplied by 10 to apply to the rate per 1,000 persons.

4. Approximate standard errors of percentage distributions of disability days associated with a chronic condition (not computed in this report) are given in table III.
5. A rough approximation of the standard errors for rates showing the average number of disability days per "persons with the condition[2] per year" is obtained by taking the square root of the sum of the square of the standard error of the numerator used in obtaining the rate divided by the numerator itself and the square of the standard error of the denominator used divided by the denominator itself, and then multiplying by the rate. This computation will normally give an overestimate of the true sampling error.

Example:

It is estimated that each person with arthritis or rheumatism in the age group 55-64 had an average of 5.2 days of bed disability attributable to these conditions (table 5). The numerator of 14,507,000 days has a standard error of 1,452,000. The denominator of 2,769,000 persons with arthritis or rheumatism has a standard error of 95,000. Using these numbers as shown below yields an answer of 0.6, the standard error of the estimated rate.

$$5.2 \times \sqrt{\left(\frac{1,452,000}{14,507,000}\right)^2 + \left(\frac{95,000}{2,769,000}\right)^2} = 0.6$$

[2]Note that where the rate refers to persons in a disease category, rule 5 applies, even if the group is further subdivided by age, sex, or color.

Table I. Standard errors of estimates of aggregates (all numbers shown in thousands)

Size of estimate	Persons with arthritis or rheumatism	Disability days
100----	18	-
500----	40	-
1,000----	60	400
2,000----	80	560
3,000----	100	720
5,000----	130	960
10,000----	180	1,200
20,000----	240	1,760
30,000----	260	2,160
50,000----	280	2,800
100,000----	320	4,400
200,000----	-	6,400
500,000----	-	12,000
750,000----	-	16,800
1,250,000----	-	25,600

Illustration of use of table I.—The estimated number of restricted-activity days reported by males with arthritis or rheumatism is 83,592,000 (table 5). Since the standard error for this figure cannot be read directly from table I, it is necessary to interpolate. The standard error for an estimate of 50,000,000 days is 2,800,000, and the standard error for an estimate of 100,000,000 days is 4,400,000. Interpolation gives 3,875,000 as the standard error for 83,592,000 days.

Table II. Standard error of percentages based on persons with arthritis or rheumatism

When the base of the percentage is: (in thousands)	For estimated percentages of:				
	2 or 98	5 or 95	10 or 90	25 or 75	50
	The approximate standard error (expressed in percentage points) is:				
100------	2.9	4.5	5.4	7.8	10.3
500------	1.3	2.0	2.4	3.5	4.6
1,000------	0.9	1.4	1.7	2.5	3.3
2,000------	0.6	1.0	1.2	1.8	2.3
3,000------	0.6	0.8	1.0	1.4	1.9
5,000------	0.4	0.6	0.8	1.1	1.4
10,000------	0.3	0.5	0.6	0.8	1.0
20,000------	0.2	0.3	0.4	0.6	0.7

Illustration of use of table II.—Of the 3,898,000 persons with arthritis or rheumatism 65 years of age and over, 10.6 percent reported major limitation of activity (table 31). Since neither of these values can be read directly from the table, interpolation may be carried out as follows: for a base of 3,000,000, a statistic of 10 percent has a standard error of 1.0 percentage points, and a statistic of 25 percent has a standard error of 1.4 percentage points. Interpolating, with a base of 3,000,000 an estimate of 10.6 percent would have a standard error of 1.02 percentage points. Corresponding calculations with a base of 5,000,000 produce a standard error of 0.81 percentage points. A final interpolation between these two results yields an estimate of 0.93 percentage points which rounds to 0.9 for a statistic of 10.6 percent with a base of 3,898,000. Although interpolation has been carried out in two dimensions here to illustrate the use of the table, a simple scanning of the table will provide an approximate answer which will usually be sufficient.

Table III. Standard errors of percentages based on disability days

When the base of the percentage is: (in thousands)	For estimated percentages of:				
	2 or 98	5 or 95	10 or 90	25 or 75	50
	The approximate standard error (expressed in percentage points) is:				
2,500-----	3.4	5.2	7.2	10.4	12.0
12,500-----	1.5	2.3	3.2	4.6	5.4
25,000-----	1.0	1.7	2.2	3.3	3.8
50,000-----	0.7	1.2	1.6	2.3	2.7
75,000-----	0.6	1.0	1.3	1.9	2.2
125,000-----	0.5	0.7	1.0	1.4	1.7
250,000-----	0.3	0.6	0.7	1.0	1.2
500,000-----	0.2	0.4	0.5	0.7	0.9

Illustration of use of table III.—Of the 27,126,000 work-loss days associated with arthritis and rheumatism, 69.4 percent (18,814,000 days) were reported for males (aggregates from table 61. Since neither of these values can be read directly from the table, interpolation may be carried out as follows: with a base of 25,000,000 a statistic of 50 percent has a standard error of 3.8 percentage points and a statistic of 75 percent has a standard error of 3.3 percentage points. Interpolating, a statistic of 69.4 percent with a base 25,000,000 would have a standard error of 3.4 percentage points. Corresponding calculations with a base of 50,000,000 produce a standard error or 2.4 percentage points. A final interpolation between these two results yields a standard error of 3.3 percentage points for a statistic of 69.4 percent with a base of 27,126,000. Although interpolation has been carried out in two dimensions here to illustrate the use of the table, a simple scanning of the table will provide an approximate answer which will be sufficient for most purposes.

APPENDIX II

DEFINITIONS OF CERTAIN TERMS USED IN THIS REPORT

Terms Relating to Chronic Conditions

Condition.—A condition is defined by an entry on the questionnaire which describes a departure from a state of physical or mental well-being. In the coding and tabulating process, conditions are first classified according to the type of disease, injury or impairment, or symptom and then according to a number of other criteria such as whether they were medically attended, whether they resulted in disability, and whether they were acute or chronic. For the purposes of each published report or set of tables, only those conditions recorded on the questionnaire which satisfy certain stated criteria are included.

Conditions, except impairments, are coded by type according to the International Classification of Diseases, 1955 Revision, with certain modifications adopted to make the coding procedure more suitable for a household-interview survey. Impairments, defined as chronic or permanent defects resulting from disease, injury, or congenital malformation, are coded according to a special supplementary classification which permits the classification of impairments by type of functional disability and etiology.

Chronic condition.—A condition is considered to be chronic if it is described by the respondent (1) in terms of one of the conditions on the "Check List of Chronic Conditions" or in terms of one of the impairments on the "Check List of Impairments" (Cards A and B, Appendix III), or (2) as having been first noticed more than three months before the interview. For this purpose, first noticed is defined as the time at which the person first felt sick or when he or his family was first told by a physician that he had a disease of which he was previously unaware. For a condition which is episodic in nature, the onset is always considered to be the original onset rather than the onset of the most recent episode.

Prevalence of a condition.—In general, the prevalence of a condition is the estimated number of cases existing in a population at a specific point in time or the average number existing during a specified period of time.

In the National Health Survey, the prevalence of a chronic condition is the number of cases reported to be present at the time of the interview or at any time during the 12 months prior to the interview. Estimates of the prevalence of chronic conditions may be restricted to cases which satisfy certain additional criteria. For example, only cases involving a day or more in bed during the past year or cases under care may be included.

Medically attended condition.—A condition is considered to be medically attended if a physician has been consulted about it either at its onset or at any time thereafter. Medical attention includes consultation either in person or by telephone for treatment or advice. Advice from the physician transmitted to the patient through the nurse is counted as well as visits to physicians in clinics or hospitals. If during the course of a single visit the physician is consulted about more than one condition for each of several patients, each condition of each patient is counted as medically attended.

Discussions of a child's condition by the physician and a responsible member of the household are considered as medical attention even if the child was not seen at that time.

For the purpose of this definition, the term "physician" includes doctors of medicine and osteopathic physicians.

Condition under care.—By under care is meant one or more of the following: (1) currently taking medicine or treatment prescribed by a physician, (2) observing a systematic course of diet or activity prescribed by a physician, (3) visiting the physician regularly for checking on the condition, or (4) under instruction from the physician to return if some particular thing happens.

Physician is again defined as a doctor of medicine or an osteopathic physician.

Terms Relating to Disability

Disability.—Disability is the general term used to describe a temporary or a long-term reduction of a person's activity as a result of a chronic condition.

Long-Term Disability

Chronic activity limitation.—Chronic activity limitation is ascertained for all persons with one or more chronic conditions. These persons are divided into 4 categories according to the extent to which their activities are limited as a result of the conditions (Cards C, D, E, and F, Appendix III). For the purpose of this report categories 2 and 3 have been combined.

Since the major activities of preschool children, school-age children, housewives, and workers and other persons differ, a different set of criteria is used to determine the amount of reduction of major activities for each group. However, there is a general similarity between the criteria as will be seen in the descriptions of the categories below.

Major limitation of activity.—Inability to carry on major activity of the group:

Preschool children:	inability to take part in ordinary play with other children
School-age children:	inability to go to school
Housewives:	inability to do any housework
Workers and all other persons:	inability to work at a job or business

Partial limitation of activity.—Limitation of amount or kind of participation in major activity of the group:

Preschool children:	limited in the amount or kind of play with other children

School-age children:	limited to certain types of schools or in school attendance; limited in participation in athletics or other extracurricular activities
Housewives:	limited in amount or kind of housework or limited in recreational or community activities
Workers and all other persons:	limited in amount of work or kind of employment or limited in recreational or community activities

No limitation of activity.—No limitation as described above.

Chronic mobility limitation.—Persons with one or more chronic conditions are also classified according to the extent of limitation of mobility (Card G, Appendix III). The four categories describing the extent of mobility limitation, which have been combined into three for the purpose of this report, are used in the classification of persons regardless of their major activity status.

1. Major limitation of mobility.—Confined to the house except in case of emergencies.
2. Partial limitation of mobility.—Limited or in need of help in moving around outside the house.
3. No limitation of mobility.—No limitation as described above.

Temporary Disability

Disability days.—Disability days are classified according to whether they are days of restricted activity, days in bed, days in the hospital, days lost from work, or days lost from school. All hospital days are, by definition, days of bed disability; all days of bed disability are, by definition, days of restricted activity. The converse form of these statements is, of course, not true. Days lost from work and days lost from school are also days of restricted activity for the working and school-age populations. Hence, restricted activity is the most inclusive term used in describing disability days.

Restricted-activity day.—A day on which because of a specific illness or injury a person substantially reduces the amount of activity normal for that day. The type of reduction will vary with the age and occupation of the individual as well as with the day of the week or the season. Restricted activity thus covers a range from substantial reduction of normal activity to complete inactivity.

Bed-disability day.—A day on which more than half the daylight hours were spent in bed because of a specific illness or injury. All hospital days for inpatients are considered to be days of bed disability even if the patient was not actually in bed at the hospital.

Work-loss day.—A normal working day on which a person did not work at his job or business because of a specific illness or injury. The number of days lost from work is determined only for persons 17 years of age or older.

Demographic Terms

Age.—The age of the person on his last birthday recorded on the questionnaire in single years. Ages are then grouped in intervals suitable for the topic under discussion.

Usually working.—A term applied to an individual 17 years of age or older who was gainfully employed as a paid employee, a self-employed person, or as a worker in a family business for more than half of the 12 months prior to the interview. A person who does only volunteer or unpaid work—such as work in his own home or work for the church or community—is not considered to be gainfully employed.

APPENDIX III

QUESTIONNAIRE

The items below show the exact content and wording of the questionnaire used in the household survey. The actual questionnaire is designed for a household as a unit and includes additional spaces for reports on more than one person.

CONFIDENTIAL: The National Health Survey is authorized by Public Law 652 of the 84th Congress (70 Stat 489; 42 U.S.C. 305). All information which would permit identification of the individual will be held strictly confidential, will be used only by persons engaged in and for the purposes of the survey, and will not be disclosed or released to others for any other purposes (22 FR 1687).

Form NHS-2 (4-18-58)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
Acting as Collecting Agent for the
U.S. PUBLIC HEALTH SERVICE

NATIONAL HEALTH SURVEY

1. Questionnaire _____ of _____ Questionnaires

2. (a) Address or description of location

3. Iden. Code | 4. Sub-sample weight | 5. Sample | 6. PSU Number | 7. Segment No. | 8. Serial No.

9. Is this house on a farm or ranch? ☐ Yes ☐ No

(b) Type of living quarters: ☐ Dwelling unit ☐ Other | (c) Name of Special Dwelling Place | Code

10. What is the telephone number here? ☐ No phone

11. What is the best time to call?

12. Are there any other living quarters, occupied or vacant, in this building (apartment)? ☐ Yes ☐ No

14. Does anyone else living in this building use YOUR ENTRANCE to get to his living quarters? ☐ Yes ☐ No

Ask at all units except apartment houses

13. Is there any other building on this property for people to live in - either occupied or vacant? ☐ Yes ☐ No

INSTRUCTIONS

If "Yes" to questions 12, 13 or 14 apply definition of a dwelling unit to determine whether one or more additional questionnaires should be filled and whether the listing is to be corrected.

15. RECORD OF CALLS AT HOUSEHOLDS

Item		1	Com.	2	Com.	3	Com.	4	Com.	5	Com.
Entire household	Date										
	Time										
Callbacks for individual respondents Col. No. ___	Date										
	Time										

16. REASON FOR NON-INTERVIEW

TYPE:	A	B	C	Z
Reason:	☐ Refusal ☐ No one at home - repeated calls ☐ Temporarily absent ☐ Other (Specify)	☐ Vacant - non-seasonal ☐ Vacant - seasonal ☐ Usual residence elsewhere ☐ Armed Forces ☐ Other (Specify)	☐ Demolished ☐ In sample by mistake ☐ Eliminated in sub-sample ☐ Other (Specify)	Interview not obtained for: Cols. ____ ____ ____ ____ ____ because:

Comments on non-interview

17. Signature of Interviewer

18. Code

Special instructions or notes

1. (a) What is the name of the head of this household? (Enter name in first column) (b) What are the names of all other persons who live here? (List all persons who usually live here, and all persons staying here who have no usual place of residence elsewhere. List these persons in the prescribed order.) (c) Do any (other) lodgers or roomers live here? ☐ No ☐ Yes (List) → (d) Is there anyone else who lives here who is now away on business? On a visit? Temporarily in a hospital? ☐ No ☐ Yes (List) → (e) Is there anyone else staying here now? ☐ No ☐ Yes (List) → (f) Do any of these people have a home elsewhere? ☐ No (leave on questionnaire) ☐ Yes (If not a household member, circle)	Last name (1) First name and initial
2. How are you related to the head of the household? (Enter relationship to head, for example: head, wife, daughter, grandson, mother-in-law, partner, lodger, lodger's wife, etc.)	Relationship Head
3. How old were you on your last birthday?	Age ☐ Under 1 year
4. Race (Check one box for each person)	☐ White ☐ Negro ☐ Other
5. Sex (Check one box for each person)	☐ Male ☐ Female
6. Where were you born? (Record state or foreign country)	(State or foreign country)
If 14 years old or over, ask: 7. Are you now married, widowed, divorced, separated or never married? (Check one box for each person)	☐ Under 14 years ☐ Married ☐ Divorced ☐ Widowed ☐ Separated ☐ Never married
If 14 years old or over, ask: 8. What is the highest grade you completed in school? (Circle highest grade completed or check "None")	☐ None ☐ Under 14 years Elem: 1 2 3 4 5 6 7 8 High: 1 2 3 4 College: 1 2 3 4 5+

If Male and 14 years old or over, ask:

9. (a) Did you ever serve in the Armed Forces of the United States? — ☐ Yes ☐ No
If "Yes," ask:
(b) Are you now in the Armed Forces, not counting the reserves? — ☐ Yes ☐ No
If "Yes," delete this person from questionnaire) →
(c) Was any of your service during a war or was it peace-time only? — ☐ War ☐ Peace-time only
If "War," ask:
(d) During which war did you serve? — ☐ Spanish American ☐ WW-II ☐ WW-I ☐ Korean
If "Peace-time" only, ask:
(e) Was any of your service between June 27, 1950 and January 31, 1955? — ☐ Yes ☐ No

If 6 years old or over, ask:

10. (a) What were you doing most of the past 12 months --
(For males over 16): working, looking for work, or doing something else?
(For females over 16): working, looking for work, keeping house, or doing something else?
(For children 6-16): going to school or doing something else?
If "Something else" checked, and person is 50 years old or over, ask:
(b) Are you retired? — ☐ Under 6 years ☐ Working ☐ Looking for work ☐ Keeping house ☐ Going to school ☐ Something else ☐ Yes ☐ No

R Interview each adult person for himself for questions 11-26 and Tables I, II, and A, if he is at home. Enter column number of respondent in each column. — ☐ Responded for self; Col. No. ____ was respondent

We are interested in all kinds of illness, whether serious or not --

11. Were you sick at any time LAST WEEK OR THE WEEK BEFORE? — ☐ Yes ☐ No
(a) What was the matter?
(b) Anything else?

12. Last week or the week before did you have any accidents or injuries, either at home or away from home? (a) What were they? (b) Anything else? — ☐ Yes ☐ No

13. Did you feel any ill effects last week or the week before from an accident or injury that happened before that time? — ☐ Yes ☐ No
(a) What were these effects?
(b) Anything else?

14. Last week or the week before did you take any medicine or treatment for any condition (besides . . . which you told me about)? (a) For what condition? (b) Anything else? — ☐ Yes ☐ No

15. AT THE PRESENT TIME do you have any ailments or conditions that have lasted for a long time? (If "No") Even though they don't bother you all the time? (a) What are they? (b) Anything else? — ☐ Yes ☐ No

Table I - ILLNESSES, IMPAIRMENTS AND ACCIDENTS

Line number	Col. No. of person (a)	Question No. (b)	Old you ever talk to a doctor about . . .? (c)	What did the doctor say it was? --did he use any medical terms? (If doctor not talked to - "No" in col. (c) - record respondent's description) (If ill-effects of earlier accident, record ill effects and also fill Table A) For an accident or injury occurring during past 2 weeks, ask: What part of the body was hurt? What kind of injury was it? Anything else? (Also, fill Table A) (d-1)	If an impairment or symptom or a condition from q. 13 or q. 17, ask: What was the cause of...? (If accident or injury, also fill Table A) (d-2)	If eye trouble of any kind and 6 yrs. old or over, ask: Can you read ordinary newspaper print with glasses? (d-3)	What kind of. . . trouble is it? Ask only for: allergy, asthma, anemia, rheumatism, arthritis, stroke, tumor (or cyst) OR Any entry in col. (d-1) or (d-2) of: trouble, condition, disease, coupled with seeing or hearing; a part of the body; "mental" or any internal organ (d-4)	What part of the body is affected? Show in following detail for members listed below: Head - (Skull, scalp or face) Spine - (Upper, middle or lower) or back Arm - (Shoulder, upper, elbow, lower, wrist, hand) Leg - (Hip, upper, knee, lower, ankle, foot) ALSO If arm, leg, eye, or ear, state whether ONE or BOTH. (d-5)	LAST WEEK OR THE WEEK BEFORE did . . . cause you to cut down on your usual activities for as much as a day? Check one: No / Yes (To Col. (k)) (e) (f)	How many days, including the 2 weekends? (g)
1			☐ Yes ☐ No		X	☐ Yes ☐ No	X	X		Days

Table II - HOSPITALIZATION DURING PAST 12 MONTHS

Line number	Col. No. of person (a)	Question No. (b)	When did you enter the hospital? (Month, Year) (c)	How many days were you in the hospital, not counting the day you left? (d)	To interviewer: How many of these -- days were in the past 12 months? (e)	To interviewer: How many of these -- days were in the past 7 weeks? (f)	To interviewer: Was this person still in the hospital on Sunday night? (g)	What did they say at the hospital the condition was -- did they use any medical terms? (If "they" didn't say, ask): What did the last doctor you talked to say it was? (Show name detail or in-patient, (d-1)-(d-5) of T.I) (If condition from accident or injury, fill Table A) (h)	Were any operations performed on you during this stay at the hospital? If "Yes" (i) (a) What was the name of the operation? (b) Any other operations? (i)
1			Mo: ____ Yr ____	____ Days	☐ All or ____ Days	____ Days	☐ Yes ☐ No		☐ Yes ☐ No

TABLE A (Accidents and Injuries)

Line No. from Table I: ____

1. What part of the body was hurt? What kind of injury was it? Anything else? — ☐ Accident happened during past 2 weeks

2. When did it happen? Year ____ (Enter month also if the year is 1957 or 1958) Month ____ — ☐ Accident happened during past 2 weeks

3. Where did the accident happen? ☐ At home (Inside or outside the house) (own home or someone else's) ☐ While in Armed Services ☐ Some other place

4. Was a car, truck, bus or other motor vehicle involved in the accident in any way? ☐ Yes ☐ No

5. Were you at work at your job or business when the accident happened? ☐ Yes ☐ No ☐ Under 14 years at time of accident

16. Has anyone in the family - you, your--, etc. -had any of these conditions DURING THE PAST 12 MONTHS? (Read Card A, condition by condition; record any conditions mentioned in the column for the person)	☐ Yes ☐ No
17. Does anyone in the family have any of these conditions? (Read Card B, condition by condition; record any conditions mentioned in the column for the person)	☐ Yes ☐ No
18. (a) LAST WEEK OR THE WEEK BEFORE did anyone in the family - you, your--, etc.-talk to a doctor or go to a doctor's office or clinic? Anyone else? If "Yes" (b) How many times during the past 2 weeks?	☐ Yes ☐ No _____ No. of times
(c) Where did you talk to the doctor? (d) How many times at -- (home, office, clinic, etc.)? (Record total number of times for each type of place) ("Hospital clinic" excludes overnight stays)	Place / Times At home . . . . . _____ At office . . . . . _____ Hospital clinic . . . . _____ Company or industry _____ Over telephone . . . . . _____ Other (Specify) . . . . _____
19. (a) Last week or the week before did anyone in the family go to a dentist? Anyone else? If "Yes" (b) How many times during the past 2 weeks?	☐ Yes ☐ No _____ No. of times
20. How many times altogether in the past 12 months did you go to a dentist?	☐ One ☐ Three ☐ Two ☐ Four or more ☐ None
21. (a) DURING THE PAST 12 MONTHS has anyone in the family been a patient in a hospital overnight or longer? If "Yes" (b) How many times were you in the hospital?	☐ Yes (Table II) ☐ No _____ No. of times
22. (a) During the past 12 months has anyone in the family been a patient in a nursing home or sanitarium? If "Yes" (b) How many times were you in a nursing home or sanitarium?	☐ Yes (Table II) ☐ No _____ No. of times
25. During the past 12 months in which group did the total income of your family fall, that is, your's, your--'s, etc.? (Show Card H) Include income from all sources, such as wages, salaries, rents from property, pensions, help from relatives, etc.	Group No.

Table I - ILLNESSES, IMPAIRMENTS AND ACCIDENTS

How many of these . . . days were you in bed all or most of the day? (h)	If 6 years old or over, ask: Last week or the week before would you have been working at a job or business except for . . . ? (If 6-16 yrs., ask, ("going to school") (i)	If "Yes" to col. (i): How many days did . . . keep you from work (going to school)? (j)	Did you first notice . . . DURING THE PAST 3 MONTHS or before that time? Check one: Before 3 months (Go to col. (n)) (k)	During 3 months (l)	Did . . . start during the past 2 weeks or before that time? (If during past 2 weeks, ask): Which week, last week or the week before? (m)	To interviewer: If col. (k) is checked, or the condition is on either one of Cards A or B, continue; otherwise STOP (aa)	Did you first notice . . . DURING THE PAST 12 MONTHS or before that time? (If during past 12 months, ask): Which month? (n)	How long since you last talked to a doctor about . . . ? (If less than one month, enter "Und. 1" for "No.") (o)	Do you still take any medicine or treatment that the doctor prescribed for . . . ? Or, follow any advice he gave? (p)	About how many days during the past 12 months, has . . . kept you in bed for all or most of the day? (q)	Ask after completing last condition for each person: Please look at this card and read each statement. Then tell me which statement fits you best. (Show Cards C-F, as appropriate) (r)	If 1, 2 or 3 in col. (r): Is this because of any of the conditions you have told me about? (s)	If "Yes" in col. (s): Which? (Enter X on line for each condition named) (t)	If "1," or "2" or "3" in col. (r) ask: Please look at this card and read each statement. Then tell me which statement fits you best. (Show Card G) (u)	Line number
____ Days or ☐ None	☐ Yes ☐ No	____ Days or ☐ None			☐ Last week ☐ Week before ☐ Before 2 wks.		No. _____ Yr. _____ ☐ Before ☐ Birth	____ Mos. ____ Yrs. ☐ No Dr.	☐ Yes ☐ No ☐ No Dr.	____ Days or ☐ None		☐ Yes ☐ No			1

Table II - HOSPITALIZATION DURING PAST 12 MONTHS

What is the name and address of the hospital you were in? (Enter name, city or county and State) (j)	For completed hospitalizations only: Was any of the hospital bill paid for by any kind of insurance? (k)	If "No" to col. (k), ask: Or, by any kind of plan that pays for hospital costs? (l)	If "No" to both cols. (k) and (l): Do you expect any of the hospital bill to be paid for by insurance or any plan of this kind? (m)	What part of the hospital bill was (will be) taken care of by insurance? (n)	Who carries the cost of this insurance--that is, who pays the premium? (o)
	☐ Yes (Skip to col. n) ☐ No	☐ Yes (Skip to col. n) ☐ No	☐ Yes ☐ No (Stop)	☐ Under ⅓ ☐ ⅓ up to ½ ☐ ½ or more	☐ Family member(s) ☐ Employer ☐ Union, clubs, etc. ☐ Other (Specify) _____

FOOTNOTES AND COMMENTS

Card A

NATIONAL HEALTH SURVEY

Check List of Chronic Conditions

1. Asthma
2. Any allergy
3. Tuberculosis
4. Chronic bronchitis
5. Repeated attacks of sinus trouble
6. Rheumatic fever
7. Hardening of the arteries
8. High blood pressure
9. Heart trouble
10. Stroke
11. Trouble with varicose veins
12. Hemorrhoids or piles
13. Gallbladder or liver trouble
14. Stomach ulcer
15. Any other chronic stomach trouble
16. Kidney stones or other kidney trouble
17. Arthritis or rheumatism
18. Prostate trouble
19. Diabetes
20. Thyroid trouble or goiter
21. Epilepsy or convulsions of any kind
22. Mental or nervous trouble
23. Repeated trouble with back or spine
24. Tumor or cancer
25. Chronic skin trouble
26. Hernia or rupture

Card C

NATIONAL HEALTH SURVEY

For:

Workers and other persons except Housewives and Children

1. Cannot work at all at present.
2. Can work but limited in amount or kind of work.
3. Can work but limited in kind or amount of outside activities.
4. Not limited in any of these ways.

Card E

NATIONAL HEALTH SURVEY

For:

Children from 6 to 16 years old and others going to school

1. Cannot go to school at all at present time.
2. Can go to school but limited to certain types of schools or in school attendance.
3. Can go to school but limited in other activities.
4. Not limited in any of these ways.

Card G

NATIONAL HEALTH SURVEY

1. Confined to the house all the time, except in emergencies.
2. Can go outside but need the help of another person in getting around outside.
3. Can go outside alone but have trouble in getting around freely.
4. Not limited in any of these ways.

Card B

NATIONAL HEALTH SURVEY

Check List of Impairments

1. Deafness or serious trouble with hearing.
2. Serious trouble with seeing, even with glasses.
3. Condition present since birth, such as cleft palate or club foot.
4. Stammering or other trouble with speech.
5. Missing fingers, hand, or arm.
6. Missing toes, foot, or leg.
7. Cerebral palsy.
8. Paralysis of any kind.
9. Any permanent stiffness or deformity of the foot or leg, fingers, arm, or back.

Card D

NATIONAL HEALTH SURVEY

For: Housewife

1. Cannot keep house at all at present.
2. Can keep house but limited in amount or kind of housework.
3. Can keep house but limited in outside activities.
4. Not limited in any of these ways.

Card F

NATIONAL HEALTH SURVEY

For: Children under 6 years old

1. Cannot take part at all in ordinary play with other children.
2. Can play with other children but limited in amount or kind of play.
3. Not limited in any of these ways.

Card H

NATIONAL HEALTH SURVEY

Family income during past 12 months

1. Under $500 (including loss)
2. $500 – $999
3. $1,000 – $1,999
4. $2,000 – $2,999
5. $3,000 – $3,999
6. $4,000 – $4,999
7. $5,000 – $6,999
8. $7,000 – $9,999
9. $10,000 and over.

* U.S. GOVERNMENT PRINTING OFFICE: 1960 O - 560244

SELECTED REPORTS FROM THE U. S. NATIONAL HEALTH SURVEY

Series A (Program descriptions, survey designs, concepts, and definitions)

No. 1. Origin and Program of the U. S. National Health Survey. PHS Pub. No. 584-A1. Price 25 cents.
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Catalog Card

U. S. *National Health Survey.*
Arthritis and rheumatism reported in interviews, United States, July 1957-June 1959; statistics on prevalence of arthritis and rheumatism and the disability due to these conditions by age, sex, and medical care status. Based on data collected in household interviews during the period July 1957-June 1959. Washington, U. S. Dept. of Health, Education, and Welfare, Public Health Service, Division of Public Health Methods, 1960.
26 p. tables. 27cm. (*Its* Health statistics, ser. B20)
U. S. Public Health Service. Publication no. 584-B20.
1. Arthritis - Stat. 2. Rheumatism - Stat.
I. Title. (Series. Series: U. S. Public Health Service. Publication no. 584-B20)
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